

**Response to Comments Document  
For the  
2004 Integrated Water List Public Comment Periods  
(October 20, 2003 Public Notice and March 1, 2004 Public Notice)**

This Response to Comment document was prepared pursuant to Sections 303(d) of the Federal Clean Water Act

State of New Jersey  
Department of Environmental Protection  
Land Use Management  
Bureau of Water Quality Standards and Assessment

May 1, 2004

## **Response to Comments For the October 20, 2003 Revised List**

### **Commenters:**

1. Widener University Environmental and Natural Resources Law Clinic on behalf of the Delaware Riverkeeper Network.
2. New Jersey Pinelands Commission. John C. Stokes, Executive Director.
3. USEPA Region II
4. Sussex County Municipal Authority, John Hatzelis, Administrator and Thomas Varro, P.E., Chief Engineer

Note: This Response to Comment Document responds to comments provided on the Proposed 2004 Integrated List public noticed for comment on October 20, 2004. The Department also received comments on the draft Integrated Water Quality Monitoring and Assessment Methods. The draft Methods Document was public noticed on June 2, 2003 with a 30 day comment period. Many of the comments on the Methods Document were redundant with those submitted to the Department during the public comment period for the Methods Document and have been responded to in the Response to Comment Document for the Methods Document. The final version of the Methods Document which was used to develop the 2004 Integrated List and the Response to Comment Document are available on the Department's website at <http://www.state.nj.us/dep/wmm/sgwqt/wat/integratedlist/integratedlist2004.html>. Although the comments on the Methods Document will not be formally responded to in this document, the Department will take them into consideration when revising the Methods Document for the 2006 Integrated List.

**Comment 1:** The Commenter commends the Department on the timely submission of the proposed 2004 Integrated List in accordance with the CWA §303(d) requirements and its decision to follow USEPA's *"Guidance for 2004 Assessment Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act"*, (TMDL-01-03, July 2003) for the format of the List. (1)

**Response to Comment:** The Department acknowledges the commenter's support.

**Comment 2:** Waterbodies were moved to Sublist 1 based upon new data showing compliance with the water quality criteria. The available data, however, does not provide sufficient detail to clearly identify all waterbodies that were delisted and/or to support the associated delisting rationale for each waterbody. We respectfully request that this information be made available for public review and comment as part of the proposed 2004 Integrated List as well as future lists. (1)

**Response to Comment:** The Integrated List includes a column entitled "Parameters Delisted" which identifies the Waterbody/Parameter combinations that are being delisted. The Department also provided information in the Integrated List which identified the source of the data. The data is available upon request from the data provider identified in the List.

**Comment 3:** A comparison of the 2002 and proposed 2004 Integrated Lists currently available for public review from the NJDEP website reveals significant discrepancies. Nearly 60 impaired waters that were included on Sublist 5 of the 2002 Integrated List are missing from the proposed 2004 Integrated List.(1)

**Response to Comment:** The Department agrees with the commenter and has added the waterbodies in the revised proposed 2004 Integrated List (3/1/04).

**Comment 4:** Gun Branch at Rt. 206 in Hammonton (AN0568G) should be listed on Sublist 3 rather than Sublist 5. (2)

**Response to Comment:** The AMNET site referenced has been moved to Sublist 3 as per the comment.

**Comment 5:** We have two comments with regard to assessing AMNET sites in the Pinelands as having "Insufficient Data." First, these sites should be placed in a category of "Not Classified" because sufficient data do exist for a biological assessment using the AMNET macroinvertebrate data. The problem is with the interpretation of the AMNET data, not the lack of data. (2)

**Response to Comment:** The statement that sufficient data regarding benthic invertebrates do exist is true; however, they are not currently useful in delineating biological status regarding disturbed vs. undisturbed conditions within the Pinelands. The Department utilizes Sublist 3 to identify waters where data or assessment methods are insufficient to characterize the status of impairment (see Section 8.1 of the Integrated Water Quality Monitoring and Assessment Methods (March 1, 2004)). List 3 is labeled as "Insufficient Data" simply to maintain consistency with the nomenclature in EPA guidance. Although using Pinelands biological data has allowed the Department to reassess many sites and reassign them to either Sublist 1 or 5, Sublist 3 represent sites where the biological condition is known and the Department has no clear thresholds that delineate acceptable and unacceptable biological communities. Until criteria are developed, the Department will employ a conservative approach and use Sublist 3 for waterbodies for which the impairment and hence listing status are unclear. They will be moved off this Sublist when a method of assessing macroinvertebrates in Pinelands habitat is developed or these sites can be assessed using alternative indicators such as biological data collected by the Pinelands Commission. Twenty-six sites have been placed on Sublist 3 until refinements can be made regarding thresholds between acceptable and unacceptable biological communities within the Pinelands.

**Comment 6:** There are several AMNET sites which fall outside the Pinelands Area, but are located within the Pinelands National Reserve. A portion of the drainage area for many of these sites is located within the Pinelands Area and some streams display typical Pinelands water-quality and biological characteristics. We suggest that the political boundary of the Pinelands Area not be used to separate Pinelands and non-Pinelands waters, but rather encourage the use of water-quality and biological characteristics to distinguish them. (2)

**Response to Comment:** The Department agrees that there are AMNET sites outside of the Pinelands Area that possess the same physical/chemical characteristics as waters within the Pinelands Area and should be assessed using biological assessment methods appropriate to this Area. This is true for chemical and biological assessments. The Department will reevaluate the appropriateness of our Surface Water Quality Standards in characterizing these transitional areas.

**Comment 7:** Approximately 85 sites assessed using biological data provided by the Commission have been classified by the NJDEP as having "Insufficient Data" and placed on Sublist 3. The classification of "Insufficient Data" is completely inappropriate for these sites for several reasons. First, the Commission has biological data for all of these sites and, for the vast majority of the sites, the data are represented by more than one taxa. Second, we would not have been able to rank these sites, or any other sites, if there were insufficient data. Finally, the relationship between the Commission's biological data and observed water-quality degradation has been fully quantified and published. Because these sites are located primarily along the middle of the water-quality degradation gradient, we strongly recommend that they be classified with some term that indicates they are intermediate

between the "Full Attainment" and "Non Attainment" classes. We cannot support the "Insufficient Data" classification. (2)

**Response to Comment:** See Response to Comment 5, second paragraph.

**Comment 8:** The McDonalds Branch at USGS gage in Woodland site should have a rank of 5 (Full Attainment) rather than 3 (Insufficient Data). (2)

**Response to Comment:** McDonalds Branch at USGS gage in Woodland is currently listed as Fully Attaining.

**Comment 9:** There are a number of instances where the NJDEP station name/waterbody do not match the Commission site code. These should be rectified: (2)

**Response to Comment:** The Department agrees with the comment and has made the necessary changes.

**Comment 10:** The commenter identified several impoundment sites surveyed by the Pinelands Commission scientists and ranked. These sites were not included in the 2004 *Integrated List*. (2)

**Response to Comment:** All waterbodies identified by the commenter are now listed on the Integrated Report with the exception of: Skit Branch beaver impoundment above Carranza Roads. This site is a beaver created impoundment. The Department identifies only naturally occurring (glacial, alluvial dam, and sinkhole) lakes and manmade impoundment on the Integrated List.

**Comment 11:** All listings should include Site ID Numbers associated with every discrete Station/Waterbody named on the Sublists. (3)

**Response to Comment:** The Department agrees with the comment and has added this information.

**Comment 12:** In addition, some Station/Waterbody Names are associated with different Site ID Numbers and recorded as separate segments. While this may not directly affect the counting and tracking of the overall number of segment/pollutant combinations, it remains difficult to discern if these Stations/Waterbodies are the same segments or if one of the station/waterbody units is a portion of the larger segment. (3)

**Response to Comment:** The Department provides a GIS coverage which, when referred to, will help clarify the spatial location of the waterbody and identify any areas of overlap.

**Comment 13:** The inconsistent application of Site ID Numbers makes it difficult to discern the actual number of segment/pollutant combinations included on the 303(d) List. For example from the 2004 draft 303(d) list, site 25 is listed twice: once alone for Phosphorus and Fecal Coliform, and once in combination with site 01407868, which was labeled 01407868/25. It is unclear if the two Site IDs for Longbrook at Wyckoff Mills refer to different portions of the waterbody or if the two Site IDs have been combined for the 2004 draft 303(d) List. (3)

**Response to Comment:** The Department agrees with the comment and has corrected the listings to alleviate the double listings.

**Comment 14:** In 2002, lead was included on the 303(d) List for this segment. In the 2004 303(d) list, lead was moved from Sublist 5 to Sublist 3. Because Sublist 3 indicates that there is not enough

information to make an assessment, it would also imply that there is not enough information to make a delisting decision. Therefore, lead for Hammonton Creek at Westcoatville should remain on the 2004 303(d) List. (3)

**Response to Comment:** New data showed no exceedence of SWQSs. However, the SWQS for lead in this waterbody is lower than the detection level. The Department took the conservative approach and listed the waterbody on Sublist 3 rather than Sublist 1 until we have sufficient laboratory capability to assess at the detection limit.

**Comment 15:** Saddle River West Br. at Upper Saddle River was originally listed for Fecal Coliform on the 2002 303(d) List and does not appear on the 2004 303(d) List. The Department must account for Saddle River West Br. at Upper Saddle River/Fecal Coliform on the 2004 303(d) List by either listing it on Sublist 5 or by justifying it's delisting and identifying it's placement onto one of the other Integrated Report Sublists. (3)

**Response to Comment:** This waterbody is listed on Sublist 4 for Fecal Coliform as a TMDL has been approved by USEPA.

**Comment 16:** On Sublist 1, Primrose Brook at Morristown National Park (01378780) only displays Dissolved Oxygen, Dissolved Solids, and Nitrate as parameters included on the list. However, in the spreadsheet, Primrose Brook at Morristown National Park lists phosphorus, fecal coliform, temperature, pH, total suspended solids, and unionized ammonia on Sublist 1. To avoid confusion, please reflect all applicable parameters and their compliance with water quality standards in both the spreadsheet and on Sublist 1.(3)

**Response to Comment:** The Department agrees with the commenter and has made the suggested correction.

**Comment 17:** For the Great Egg Harbor at Weymouth location, lead is delisted, yet no justification is provided for the delisting. The 2004 303(d) List should be revised to include a justification for delisting lead at the Great Egg Harbor at Weymouth. Several stations are delisted for reason 1B, which indicates that new information demonstrates that the segment is now meeting water quality criteria for the previously listed pollutant. However, none of these segment/pollutants appear on Sublist 1 and the source of the new information is not identified. The 2004 Sublists should be revised to include these segment/pollutant combinations on the appropriate sublist. (3)

**Response to Comment:** The Great Egg Harbor at Weymouth location has been delisted for lead due to new information. The Integrated List has been corrected to reflect this. The Department uses fish consumption data to identify impaired waterbodies. The Methods Document does not identify a method to evaluate data outside of the fish consumption advisories for listing Full Attainment waters. The Department will look at developing a method to incorporate toxics data from fish tissue that shows no toxicity with data from the water column which may or may not show toxicity.

**Comment 18:** Several segment/pollutant combinations listed the 2002 Integrated Report Sublists cannot be tracked on any of the proposed 2004 Integrated Report Sublists. For example, the Pompton River at Pompton Plains for dissolved oxygen was on Sublist 1 and several segments (Hammonton Creek, Toms River and the Great Egg Harbor) were listed on Sublist 3 for silver. Please identify where these segments/pollutants can be found on the 2004 Integrated Report Sublists. (3)

**Response to Comment:** The Pompton River at Pompton Plains has been added to Sublist 1 for dissolved oxygen. The sites listed for silver were erroneously listed on Sublist 3 in 2002. The

Department does not have any silver data for these waterbodies.

**Comment 19:** The Department should better justify the decision to consider or to exclude data based upon the criteria outlined in the 2004 Monitoring and Assessment Methodology.(3)

**Response to Comment:** The Department will discuss the rational for excluding any data in the Integrated List Report as noted in the Methods Document. No data was excluded in developing the 2004 Integrated List.

**Comment 20:** The Department is defining some FW2-NT waters as Pineland-like in terms of their assessment. Even if some FW2-NT waters are Pineland-like, FW2-NT waters are associated with specific water quality criteria. The 2004 Sublists should specify which FW2-NT waters the Department identifies as Pineland-like, and the 2004 Monitoring and Assessment Methodology should clarify the assessment of these Pineland-like waters in regards to the appropriate, current New Jersey SWQS. (3)

**Response to Comment:** Pinelands-like waterbodies are presently classified as FW-2 waters and are being assessed using the criteria for FW-2 waters until the Department addresses this issue in its SWQSS. Pineland-like waters not meeting FW-2 criteria are placed on Sublist 5.

**Comment 21:** The Region concurs with Department's response concerning minimum sample size for toxic parameters being included in the table and apologizes for misreading the table associated with toxic parameters. However, the Region questions Department's interpretation of water quality criteria for toxic parameters in relation to limited sample sizes. The Department's Monitoring and Assessment Methodology states that "a single exceedence is not sufficient to determine the attainment status of a site", therefore, "non attainment" waters require at least two exceedances to confirm water quality does not meet SWQS. This ensures that even with additional sampling, which would meet the recommended data requirements, the assessment result will not change" (Page 11). In addition, the Department's methodology states that for modified assessment of toxic parameters, when two or more samples exceed the SWQS, the assessment unit is considered "non-attainment" (Pg. 18). In keeping with the Department's Monitoring and Assessment Methodology as described above, the USEPA Region II strongly recommends listing waters that exceed aquatic life criteria for toxic pollutants more than once in three years, regardless of sample size and sampling frequency. (3)

**Response to Comment:** The Department uses the modified assessment method on a case by case basis which allows the Department to insure that a small data set is, in fact, representative of the overall conditions of the waterbody. For example, 2 samples taken a day apart would not be considered representative of the waterbody over a three year period.

**Comment 22:** Based upon the description of estimated waters in the Department's Assessment Methodology, Estimated waters are extrapolated from monitored waters based on land use and will be used for sublist 3 only, given the lower degree of confidence (Pg. 42). The Response to Comments document states that "the Department does not place estimated waters on Sublist 3 at this time" (Pg. 8). Given the two opposing statement, it is unclear if estimated waters are included in Sublist 3. The Department should rectify the inconsistency between the Assessment Methodology discussion and their Response to Comments. The Department should provide descriptions of the different waters included on the 2004 Sublist 3, such as: waters scheduled for future monitoring, waters included on Sublist 3 because the only information associated with them are derived from models, and waters without associated monitoring or modeling information that are not scheduled currently for monitoring. (3)

**Response to Comment:** The Methods Document states that the Department may place estimated waters on Sublist 3 (as opposed to Sublists 1, 4 or 5). For 2004, the Department has not placed the estimated waters on Sublist 3. It is anticipated that many of the estimated waters will be monitored prior to the 2006 Integrated List and will be placed on the appropriate Sublist at that time. The Department may break down Sublist 3 in the future, but at this time, all waterbodies that require additional monitoring and/or assessment tools are on Sublist 3.

**Comment 23:** The USEPA Regions and States want a consistent assessment of the main stem of the Delaware River, and have agreed to have the Delaware River Basin Commission assess the main stem of the Delaware River to ensure consistent assessments and listings. While USEPA Region II acknowledges that the Delaware River Basin Commission's Assessment Methodology and assessments of the main stem of the Delaware River were not yet complete and were unavailable during Department's public comment period, USEPA Region II stresses that the Department should inform the public when the Delaware River Basin Commission releases the Assessment Methodology and assessments. The Department should subsequently public notice any changes to the New Jersey 2004 303(d) List due to the Delaware River Basin Commission's assessment. (3)

**Response to Comment:** The Department has incorporated the Delaware River Basin Commission's assessment into the 2004 Integrated List and has public noticed the changes on March 1, 2004.

**Comment 24:** The Department inconsistently presents bacteriological information and phosphorus information on the Integrated Report Sublists. Bacteriological information may be presented as fecal coliform, total coliform, or pathogens. To avoid confusion and to make reporting of segment/pollutant combinations in the categories more consistent, please consistently report pathogens as fecal coliform or total coliform depending on the use impairment. In addition, a few segment/pollutant combinations are described as Total Phosphorus as opposed to phosphorus. While phosphorus may be recorded as Total Phosphorus as described in New Jersey's SWQS, please consistently describe the pollutant as phosphorus to lessen any confusion. (3)

**Response to Comment:** The Department agrees with the comment and has corrected the Integrated List.

**Comment 25:** The commenter acknowledges and appreciates the delisting of phosphorus for the Wallkill River at the Sparta and Franklin locations. (4)

**Response to Comment:** The Department acknowledges the comment.

**Comment 26:** The commenter questions the impairment listing for the Wallkill River at Route 23 in Hamburg, NJ, with regard to Dissolved Solids. The Department has reported that the data source is "Existing Water Quality" (EWQ) data. The commenter has requested EWQ data from the NJDEP. Only a very limited database has been released for public review, and that data does not indicate a basis for impairment. Prior to finalization of the 2004 Integrated List of Waterbodies, the Department should make all pertinent data available to allow for the opportunity of public review of the listing rationale. The Department should summarize the basis of this impairment determination, including total number of samples, and number of samples exceeding the water quality criteria. The sample date and streamflow conditions are also pertinent and should be provided. The Department should consider all appropriate information prior to making a dissolved solids impairment determination for the Wallkill River at Route 23 in Hamburg, NJ. The Wallkill Watershed Management Area (WMA 02) Group has submitted to the Department, a report dated September 30, 2003 and titled "Characterization/Assessment of WMA 02 Surface Waters". This extensive and current database shows all sixty (60) samples in compliance with the surface water quality standard of 500 mg/l for

Total Dissolved Solids and supports a determination of non- impairment relative to dissolved solids. The commenter therefore believes that, absent the Department's finding of full attainment for dissolved solids in the Wallkill River, that this location would be better represented on Sublist 3, due to the fact that the Department is relying upon insufficient data to determine attainment of the surface water quality criteria. Such would allow for the collection and assessment of additional data rather than making an impairment decision which conflicts with all other assessments of the Wallkill River. (4)

**Response to Comment:** The Department has moved the Wallkill River at Hamburg to Sublist 3 for dissolved solids as suggested. EWQ data is available to the public through USEPA's STORET database.

**Comment 27:** The Department has listed impairments for aquatic life for the Wallkill River at Route 565 in Wantage, NJ, and at Route 94 in Hamburg, NJ. The source is noted to be AMNET data. While the commenter does not question this data, we do however question whether the Department has ever reviewed and/or considered the SCMUA's "Biannual/Final Report of Biological Assessment of the Upper Wallkill River" dated March 1998. This report reflects a 5 year study which was performed under a NJDEP approved QA/QC Work Plan. The conclusion of that study, which included both spring and fall sampling events in 1993, 1995 and 1997, confirms that "poor habitat quality, not poor water quality was the principal limiting factor" in the Wallkill River system. The commenter requests review of said report relative to the determination of the aquatic life impairment status of the Wallkill River. (4)

**Response to Comment:** The Department has reviewed the report mentioned by the commenter. We assume that the commenter is suggesting that the portions of the Wallkill basin in question be listed on Sublist 4C rather than Sublist 5. While the reports in question suggest that sediment and poor substrate quality may be the principal cause of benthic community impairment\*, it is not clear whether these are the only causes of impairment at these locations. The possible impacts from toxic substances from the many industrial outfalls in the watershed as well as pesticides from agriculture and developed areas have not been evaluated. In addition, the impacts from stormwater outfalls have not been assessed. While the Report presents data and conclusions regarding the impact of the SCUMA Treatment plant upgrades, there are other potential sources of impairment within the watershed, which the Report does not address. The Department, as part of the TMDL process, will evaluate all potential causes of biological impairment and will at that point make decisions as to the suitability of listing these waters on Sublist 5 and moving forward with a TMDL(s).

\*It should be noted that the DO status of these waters is highly variable with violations of the State's SWQS being observed in 6 of the 7 stations during sampling in May 1995 which makes this Department call into question the conclusion that water quality is not a potential contributor to benthic impairment. Although at other times (including the most recent sampling) the DO status of these waters appears acceptable, perhaps the DO status should be explored with diurnal sampling.

### **Response to Comments For the March 1, 2004 revised List**

#### **Commenters:**

1. Widener University Environmental and Natural Resources Law Clinic (Timothy D. Glazar) and Mid-Atlantic Environmental Law Center (James R. May, Esq., Clinic Director, and James Stuhltrager, Esq.,) on behalf of the American Littoral Society and the Delaware River Keeper Network
2. New Jersey Pinelands Commission. John F. Bunnell, Principal Research Scientist

3. USEPA Region II
4. New Jersey Department of Agriculture, James Sadley, Executive Secretary, SSSC

### **Comments**

**Comment 1:** The proposed Sublist 5 indicates that most of the proposed waterbodies are impaired for Benthic Macro-invertebrates. The list does not indicate which pollutants cause the impairment. Without knowing the water quality standard that is exceeded, it is not possible to develop a TMDL. The USEPA guidance on the Integrated Listing (CWA 305 (b) & 303(d)) states that all waterbodies impaired or threatened for one or more designated uses by a pollutant(s) and requiring a TMDL should be placed in a sublist 5. It may be helpful to reference to the relevant standards that are exceeded for this and other impairments. (4)

**Response to Comment:** USEPA requires States to identify impaired waterbodies and list these waterbodies on Sublist 5 unless a State can demonstrate the effect is due to pollution. As a result, these waterbodies will remain on Sublist 5 until the cause of impairment can be determined. When the Department can identify a specific pollutant, this information will be provided. The Department, as part of the TMDL process, will evaluate all potential causes of biological impairment and will, at that point, make a decisions as to the suitability of listing these waters on Sublist 5 and moving forward with a TMDL(s).

**Comment 2:** Sublist 5 includes many data sources that are attributed to local health departments, watershed coalitions, etc. The Draft NJDEP Methods document sets the requirements for the number, frequency and quality of the sampling data and prescribes standards for full attainment, non-attainment and insufficient data categories for the listing process. We expect that all the data used in developing the list comply with the requirements set in the above document. Also, some of the data sources are left blank on the sublist. We recommend that data from an ambiguous source or not conforming to NJDEP requirements should not be utilized in this exercise.(4)

**Response to Comment:** The Department agrees with the commenter and only uses data that meet the quality objectives identified in the Methods Document for listing purposes. The Department has provided the omitted information for the data sources which were previously left blank.

**Comment 3:** The proposed list includes many impairments indicated as Fecal Coliform and Phosphorus that may or may not have possible connection to agriculture. In case of documented evidence of these impairments, we recommend that sophisticated science-based determinations are made for the actual sources of the pollutant loads and loads from non-agricultural sources such as septic systems, wild animals and sewage treatment plants, etc. are not attributed to agriculture.(4)

**Response to Comment:** As part of implementing the TMDLs, bacterial source trackdown to distinguish between human non-human sources will be conducted through follow-up monitoring as well as to confirm impairment and to determine geographic scope of the impairment. Total Phosphorus TMDLs completed to date are for lakes and recognize that more detailed source quantification and analysis of nutrient fate in lakes is needed to determine, for example, if additional measures are needed with respect to municipal stormwater contributions. Never the less, load reductions required are substantial and it is likely that reductions from all sources will be needed to attain water quality standards.

**Comment 4:** Threatened waterbodies by definition are not “impaired” and should not be included in sublist 5. Although it is required by the USEPA, the inclusion of a threatened waterbody in a 303(d) list of impaired water bodies does not follow sound science.(4)

**Response to Comment:** Threatened waters are evaluated using EPA Guidance “If water quality now meets applicable water quality criteria but adverse water quality trends indicate that water quality criteria will not be met in 2 years, the waterbody is assessed as threatened and classified as non-attainment” based on guidance for the Integrated Report (USEPA, 2001). The definition of “threatened” as applied in Table 5.2 is consistent with USEPA guidance for 303(d) listings. The Department has followed USEPA guidance and classified waterbodies as threatened on Sublist 5. This allows the Department to be pro-active and take steps to prevent the continuing degradation of the waterbody.

**Comment 5:** The Department believes that the designation of impaired waterbodies based on fish-tissue concentrations is inappropriate. Fish-tissue concentrations alone are not indicative of water column exceedences of the pollutant since the chemicals bio-accumulate in fish. The longer a fish lives, the greater the chances of higher concentrations of pollutants in fish tissue. If the water column concentrations do not exceed the water quality standards, a TMDL is not necessary and as such the water segment should not be labeled as impaired.(4)

**Response to Comment:** The Department must assess compliance with all aspects of the Surface Water Quality Standards (SWQS). New Jersey’s SWQS include water quality goals, policies, numeric and narrative criteria, and applicable design flows and waterbody classifications. The Toxics policy in the SWQS states: “Toxic substances in waters of the State shall not be at levels that are toxic to humans or the aquatic biota, or that bioaccumulate in the aquatic biota so as to render them unfit for human consumption.” In addition to the numeric criteria for individual toxic parameters specified in the SWQS, the Department uses several translators to assess compliance with the narrative toxic policy. These translators include: fish consumption advisories, shellfish closure data, and drinking water designated use assessments with regard to human health; and dissolved oxygen and macroinvertebrate data to assess toxic effects on aquatic life. USEPA has provided states with guidance that strongly advises using fish consumption advisories as a means to assess public health/aquatic life uses since the bioaccumulation of toxics in fish can have both negative human health and ecological effects. See: Guidance to States on preparing Comprehensive Water Quality Assessments 305(b) Reports including Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) reports) and Electronic Updates: Report Contents Office of Water United States Environmental Protection Agency. USEPA-841-B-97-002A. September 1997. Subsequently USEPA developed a Consolidated Assessment and Listing Methodology (CALM) for use by the states (Consolidated Assessment and Listing Methodology: Toward a Compendium of Best Practices. First Edition. July 2002. U.S. Environmental Protection Agency. Office of Wetlands, Oceans, and Watersheds (<http://www.epa.gov/owow/monitoring>)) which states that concentrations of pollutants in fish tissue can be used in risk-based calculations to assess attainment of the fish consumption use as well as to issue fish consumption advisories. The Department recognizes some of the issues with using data from fish consumption studies for local water quality assessment and some of the problematic aspects of seeking local sources and causes for bioaccumulated contaminants in fish, some species which may be highly mobile and even migratory. However, the Department believes the high quality of its data, the broad range of species captured, and, in many instances, the broad geographical areas identified, justifies their use in assessing localized water quality due to toxics bioaccumulation. Existing water quality criteria for toxics in water take into consideration bioaccumulation. These water quality standards serve as endpoints for human health protection through effluent limitations and TMDL development and are expected to reduce levels in both the fish and the ecosystem. If Surface Water Quality Criteria are below the method of detection, results of sampling the

water column often are non-detect. Therefore, the Department must rely on fish tissue contamination to indicate an exceedance of criteria. Fish tissue concentrations resulting in a fish advisory reflect the presence of an actual problem. Therefore, the Department has determined that a fish advisory for a pollutant with a surface water quality criteria is a valid basis for placing a waterbody in Sublist 5. The Department reviewed fish advisories and determined that if the advisory was based upon current fish tissue data, the waterbody would be listed as impaired on Sublist 5. Waterbodies with historical fish advisories without current information were placed on sublist 3.

**Comment 6:** Sublist 5 should not include any waterbody impaired by “unknown toxicity”. Appropriate exceedences of pollutants should first be determined prior to inclusion in Sublist 5.(4)

**Response to Comment:** USEPA requires all impaired waterbodies be identified on Sublist 5 even if the cause of the impairment is unknown, until a TMDL is adopted or a determination that the impairment is due to “pollution” rather than a “pollutant”.

**Comment 7:** The Commenter would like to see precise determinations of any pollutants that are attributed to the agricultural land use. The Commenter would also like to have GIS coverage of the areas contributing to these pollutants to help facilitate a coordinated and targeted approach to conservation efforts.(4)

**Response to Comment:** The TMDL process will identify the sources and causes which contribute to the impairment and the level to which they contribute. The Department will share any information regarding pollutants that are attributed to agricultural land use with the Department of Agriculture. The Department will also provide GIS coverage of the impaired waterbodies as they become available which the Department of Agriculture can use to target conservation efforts.

**Comment 8:** The revised Integrated List does indicate which Waterbody/Parameters combinations are being delisted; however, the List still appears to contain errors. The List indicates that certain waterbodies were delisted from Sublist 5 and moved to one of the other sublists. Our review shows that 134 waterbodies are actually found on a different sublist from that identified under the “Delisting Rational [sic]” or are not found on any sublist. (1)

**Response to Comment:** There appears to be some confusion with the information provided under the heading “Delisting Rational”. The numbers under “Delisting Rational” refer to the reasons or rational for Delisting the waterbody for a specific parameter, not the sublist that the waterbody was moved to. These reasons/rational are explained in more detail in the Methods Document in Section 8.3 and will be included in the prologue to the Final Integrated List. A footnote has been added to the Integrated List (Sublist 5) to eliminate the confusion.

**Comment 9:** Despite the Department’s agreement and tacit assurance that all the missing waterbodies were added back onto the 2004 revised Integrated List, only five of these waterbodies were found on any sublist of the revised Integrated List. In fact, 54 waterbodies remain missing from the revised proposed 2004 Integrated List.(1)

**Response to Comment:** The waterbodies identified by the commenter as missing and not carried over to the 2004 Integrated List were not part of the 2002 Integrated List adopted January 21, 2003. The final 2002 Integrated List can be viewed at <http://www.state.nj.us/dep/wmm/sgwqt/wat/integratedlist/integratedlist.htm>.

**Comment 10:** “Duck Pond Run at Clarksville” was included on the 2002 303(d) list for fecal coliform, copper, lead, and zinc. The Department has included this water in its 2004 Integrated Report on Sublist 4 for fecal coliform and on Sublist 3 for copper, lead, and zinc. NJDEP should explain why these pollutants were delisted and moved to other sublists of its 2004 Integrated Report. (3)

**Response to Comment:** “Duck Pond Run at Clarksville” was placed on Sublist 4 for fecal coliform after a TMDL was approved. The waterbody was erroneously placed on Sublist 5 in 2002 for copper, lead, and zinc. The Department had only one data point which is insufficient to make an assessment. Therefore the waterbody has been placed in Sublist 3 consistent with our 2004 Methods Document

**Comment 11:** For the 2004 submittal of the CWA 303(d) list, the Department must identify and explain all waterbody/pollutant combinations which no longer appear on the 2004 CWA 303(d) list either because the water has been renamed or that specific waterbody/pollutant combination no longer is classified as impaired. (3)

**Response to Comment:** The Department intends to provide a list that will identify all waterbody/parameter combinations removed from Sublist 5 with the final Integrated List. This list will be part of the submission to USEPA and available to the public on the Department’s webpage.

**Comment 12:** As was done with the 2002 CWA Section 303(d) submission, please provide the sampling data to support decisions to either add or remove a waterbody/pollutant combination from Sublist 5. (3)

**Response to Comment:** The Department will provide a summary of the data used to either add or remove a waterbody/pollutant combination from Sublist 5 as was done in 2002. This summary will be posted on the Department’s webpage.

**Comment 13:** There are 972 rows in the spreadsheet labeled “Sublist 5” yet there are 1,017 rows in a different spreadsheet labeled “Ranked Sublist 5.” In order to approve the CWA Section 303(d) submission, the state must clearly identify a ranking for each waterbody/pollutant combination on Sublist 5. (3)

**Response to Comment:** The Department has made corrections to both Sublist 5 and Ranked Sublist 5, both contain the same number of records.

**Comment 14:** The state should identify the total number of individual waterbody/pollutant combinations on Sublist 5 in its 2004 CWA Section 303(d) submittal. (3)

**Response to Comment:** The Department has provided a table in the Integrated Report that provides the information requested by the commenter.

**Comment 15:** The listing for the Delaware River for 1,2-dichloroethane and tetrachloroethylene should be broken down into the two discrete areas for which two TMDLs were established: an area covering Zones 2 & 3 and another covering Zones 4 & 5. In order to be consistent, list all TMDLs that have been established. The following TMDLs are missing: the four TMDLs for PCBs for the Delaware River Zones 2-5; the TMDL for the Arthur Kill for mercury; the TMDL for the Hudson River for mercury; and, many of the expedited TMDLs established for fecal coliform and phosphorus.(3)

**Response to Comment:** The Department agrees with the comment and has made the following corrections to Sublist 4: The Delaware listings for 1,2-dichloroethane and tetrachloroethylene have

been broken down; Delaware River Zones 2-5 were added for PCBs; the Arthur Kill and Hudson River were added for mercury; and, additional listings for fecal coliform and phosphorus were added.

**Comment 16:** The Department has listed waterbody/pollutant combinations on Sublist 4 which do not have TMDLs yet. Two examples are: “Rancocas Creek N. Br. at Iron Works Park at Mt. Holly” and “Rancocas Creek N. Br at Browns Mills”, both for fecal coliform. A TMDL has been approved for Lower Sylvan Lake for phosphorus but it did not cover Upper Sylvan Lake therefore this reference in Sublist 4 is incorrect. There were no TMDLs approved for the Whippany River at Morristown and near Pine Brook for phosphorus. The Sublist 4 listing of the Atlantic Ocean for total coliform uses the exact reason that was provided in 2002 yet we were informed that the problem had been fixed. (3)

**Response to Comment:** The Department disagrees with comment regarding the “Rancocas Creek N. Br. at Iron Works Park at Mt. Holly” and has retained it on Sublist 4 for fecal coliform (TMDL was approved by USEPA). The Department agrees with the remainder of the comment and has made the following changes: “Rancocas Creek N. Br at Browns Mills” was moved to Sublist 5 for fecal coliform; The Whippany River at Morristown and near Pine Brook was moved to Sublist 5 for phosphorus; and the Upper Sylvan Lake has been placed in Sublist 5. The area off of Cape May that was listed on Sublist 4 for a broken pipe was mis-identified. The pipe has been repaired, the water re-sampled, and the actual area of the broken pipe is on Sublist 1. The area placed on Sublist 4 in 2002 has been moved to Sublist 5. Historic data shows impairment in this area and there is no new data to re-assess the waters at this time.

**Comment 17:** There is a delisting which occurred in 2002 which was incorrect and should be rectified. Strawbridge Lake had been listed for phosphorus and clean sediment not related to the phosphorus loading yet both were removed from Sublist 5 based on having a TMDL in place. A TMDL for phosphorus for Strawbridge Lake was established. The TMDL document states that the sediment problem derives from storm water runoff and erosion of lake shoreline and that dredging would address short-term loading. ☐ *Has a remediation plan been implemented to address this clean sediment problem?* ☐ If not, then Strawbridge Lake should still be included on Sublist 5 for clean sediment.(3)

**Response to Comment:** Strawbridge Lake was listed on the 1998 303(d) List as impaired for algae, total phosphorus and fish tissue. In 2002, algae/total phosphorus listings were renamed “eutrophic(nutrients/sedimentation)”. Nutrients/sedimentation was used to describe all lakes with eutrophic conditions. The sedimentation part reflected filling in by decaying algae. The use of “eutrophic(nutrients/sedimentation)” was misleading as it implied that sedimentation was a direct impact of siltation and not a result of excess algae. After consultation with USEPA Region II, the term “eutrophic(nutrients/sedimentation)” was replaced with “total phosphorus” as the pollutant causing the impairment and these lakes are now described as exceeding total phosphorus in the 2004 Integrated List (as they were originally listed in 1998). Sedimentation was never a direct impairment for Strawbridge Lake and the pollutant descriptor “eutrophic (nutrients/sedimentation)” was replaced with “total phosphorus”. Therefore, “sedimentation” is not identified as a pollutant of concern on Sublist 5.

**Comment 18:** a. Site ID Name and Numbers; For Longbrook at Wyckoff Mills: Site 25 is listed twice: once alone for phosphorus and fecal coliform, and once in combination with site 01407868, which was labeled 01407868/25. It is unclear if the two Site IDs for Longbrook at Wyckoff Mills refer to different portions of the waterbody or if the two Site IDs have been combined for the proposed 2004 303(d) List. For Shepherd Lake/Sheppard Pond: These two listings seem to refer to the same waterbody but have different Site Names and IDs. Please review. (3)

**Response to Comment:** The Department agrees with the comment and has made the following changes: Longbrook at Wyckoff Mills is identified only once as 01407868/25; and the two Shepherd Lakes are one and the same and have been combined.

**Comment 19:** Shark River near Neptune has a site ID of 01407705 in 2002 and of 01407750 and 01407750/EWQ0482 in 2004. Please review.(3)

**Response to Comment:** The site ID identifies the various stations in one or more monitoring networks which are included in the spatial extent of a waterbody. In 2002, the site ID of 01407705 reflected the use of data from the Ambient Network. In 2004, the site ID (01407750/EWQ0482) includes data from the Ambient Network as well as data from the Existing Water Quality Network. The waterbody with the site ID of 01407750/EWQ0482 is the same waterbody previously referred to as site ID of 01407705 in 2002

**Comment 20:** The Great Egg Harbor at Weymouth has been delisted for lead but no justification is provided for the delisting. The 2004 303(d) List should be revised to include a justification for delisting lead at the Great Egg Harbor at Weymouth.(3)

**Response to Comment:** The Great Egg Harbor at Weymouth was delisted from Sublist 5 and placed on Sublist 1 with new data. 1B has been added to the Delisting Rational column to reflect the use of new data.

**Comment 21:** Stations listed in 2002 for contaminants in fish tissue were delisted in 2004 indicating that new information demonstrates that the segment is now meeting water quality criteria for the previously listed pollutant. However, none of these waterbody/pollutant combinations appear on Sublist 1. The source of the new information is not identified. The 2004 Integrated Report should be revised to include these waterbody/pollutant combinations on the appropriate sublist. (3)

**Response to Comment:** The Methods Document identifies Fish Consumption Advisories issued by the Department as the assessment tool for assessing the narrative toxics policy. The Department lists those waterbodies, with consumption advisories as impaired. The use of Fish Consumption Advisories only identifies those waterbodies which are impaired. It does not identify those waterbodies where fish tissue data was collected and advisories were not necessary. The Department has identified this as a data gap and will work with the Division of Science and Research to better utilize the fish consumption advisory data to identify waterbodies which have data and no advisories.

**Comment 22:** The following sites have the same Site Name and Site ID, but are either listed under different watersheds for Category 1 and Category 3 pollutants or listed for the same pollutant in different watersheds: Barren Neck Brook at Long Bridge Rd in Colts Neck, Shabakunk Creek near Lawrenceville, and Shappen Run at Holmes Mill Rd in Upper Freehold. (3)

**Response to Comment:** The Department agrees with the commenter and has made the necessary corrections.

**Comment 23:** The Department needs to provide sound reasons based on the data assessment methodology as to why the data from "Coastal 2000" was not used. (3)

**Response to Comment:** The Methods Document requires that the data used in the development of the Integrated List be publicly available. Since not all of the "Coastal 2000" data has been through the final QA/QC process and the report has not been finalized, the Department determined that the data was not available to the public in time for the public notification of the proposed 2004 Integrated List.

The Department did review the water chemistry data and the use of “Coastal 2000” data would not have changed the assessment results.

**Comment 24:** The Department is defining some FW2-NT waters as Pineland-like in terms of their assessment. Even if some FW2-NT waters are Pineland-like, FW2-NT waters are associated with specific water quality criteria. The 2004 Integrated Report should specify which FW2-NT waters the Department identifies as Pineland-like, and the 2004 Monitoring and Assessment Methodology should clarify that these Pineland-like waters have been assessed based on the appropriate, current New Jersey SWQSS. (3)

**Response to Comment:** All waters designated as FW2-NT are assessed using SWQS appropriate for FW2-NT. Although the Department has placed these waterbodies on Sublist 5 in 2004, the Department realizes that some of the violations are likely due to natural conditions. The Department anticipates that actions other than TMDLs may be more appropriate.

**Comment 25:** The commenter strongly recommends listing waters that exceed aquatic life criteria for toxic pollutants more than once in three years regardless of sample size. If two exceedences are already recorded, then meeting the minimal sample size is no longer necessary.(3)

**Response to Comment:** The Methods Document provides for a Modified Assessment Method which can be used for datasets that do not meet the recommended data requirements as outlined for each assessment, but still have value in assessing water quality. Examples of this type of data may include: 1) datasets of less than 8 samples; 2) sampling less than quarterly frequency; or 3) the duration of sampling is less than 2 years. Datasets of these types are evaluated on a case-by-case basis to determine if the data characterize the range of water quality variation that adequately represent conditions of existing water quality. Table 4.6 in the Methods document allows a waterbody, under the Modified Assessment Method, to be placed in Sublist 5 with 2 exceedences of a toxic SWQS if the data characterize the range of water quality variation that adequately represent conditions of existing water quality.

**Comment 26:** The following sentence was provided by NJDEP as a response to a comment on weight of evidence and EPA encourages NJDEP to incorporate this sentence into the body of the assessment methodology: “If the Department has the occasion to assess different weights to data, the specific rationale used will be detailed in the Integrated Report”. (3)

**Response to Comment:** The Department has added the recommended language to “Weight of Evidence” (Page 11).

**Comment 27:** The Department should rectify the inconsistency between the assessment methodology and the response-to-comments discussions concerning estimated waters. The Department should provide descriptions of the different waters included on 2004 Sublist 3, such as waters scheduled for future monitoring, waters included on Sublist 3 because the only information associated with them are derived from models, and waters without associated monitoring or modeling information that are not currently scheduled for monitoring. (3)

**Response to Comment:** Estimated waters use assessment results extrapolated from adjacent monitored waters using the hydrologic method for estimating spatial extent. Extrapolations will be based on land use, possible pollution sources, and best professional judgement. Given the lower degree of confidence, estimated waters will, when coupled with monitored waters, be placed on any one of the Sublists as determined by the monitored waters. They will not require a

TMDL if estimated as impaired but will most likely be included in any additional monitoring required by the TMDL of the monitored waters. The additional information on Sublist 3 waterbodies is discussed in Part IV of the Integrated Report under the section titled "Monitoring and Assessment Schedule for Waters on Sublist 3 of the 2004 Integrated List".

**Comment 28:** The impoundment at Camp Inawendiwin (SFRCAMPI) was incorrectly included with the Mullica River WMA. This site is in the Rancocas WMA. Second, there are many sites in both WMAs that have a Pinelands site code and a designation of "Pinelands" in the Data Source category, but are listed based on some other parameter unrelated to data provided by the Pinelands Commission. This practice was not consistent throughout. For those sites listed using non-Commission data, all reference to the Pinelands Commission should be deleted so that it is clear that the sites are listed for other reasons. Third, on Sublist 3 for WMA 14, the parameter listed for the classification of Atsion Lake (MMUATSIO) should be "Pineland Biological Community" rather than the older "Fish Community" designation. (2)

**Response to Comment:** The WMA for Camp Inawendiwin has been corrected (WMA 19). When the Department has data for a specific waterbody submitted by multiple entities including the Pinelands Commission, all sources of data were identified for that waterbody. The Department made the recommended change to "Pineland Biological Community" for Atsion Lake.